APPENDIX 9 510(K) SUMMARY

Submitted by: Zynergy CardioVascular, Inc. 298 Fernwood Ave. Edison, NJ 08837

August 28, 2000

This 510(k) Summary of Safety and Effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

1. Contact Person:

Ms. Jing Zhang Manager, Regulatory Affairs/Quality Assurance Zynergy CardioVascular, Inc. 298 Fernwood Ave. Edison, NJ 08837 Phone: (732)225-3800 Fax: (732)225-4454

2. Device Name and Classification:

Trade name: Zynergy Z4 Transvenous Bipolar Pacing Catheter

Common / Usuai Name: Transvenous Pacing Catheter

Classification Name: LDF - Electrode, Pacemaker, Temporary, CFR 870.3680

DRF- Catheter, electrode recording, CFR 870.1220

Classification Panel: Cardiovascular

Device Class: Class II

3. Substantial Equivalence:

The Zynergy Z4 Transvenous Bipolar Pacing Catheter is substantially equivalent to the following two predicate devices:

> 1) Elecath Silicore Semi-Floater Electro-Catheter Corporation

2) Arrow Bi-Polar Electrode Catheter Arrow International

4. Device Description:

The Z4 catheter was designed and tested in accordance with the applicable sections of ISO 10555-1:1995, Sterile, Single-Use Intravascular Catheters - Part 1: General Requirements and FDA guidelines.

The Z4 catheter is comprised of a polyurethane main body tube with two electrodes attached on distal end and a molded junction which provides attachment for two lead wire assemblies on the proximal end. The tubing is 4, 5 or 6 Fr in diameter. The electrode length is 5 mm max and electrode spacing is 1 cm. There are wires on the inside of

the catheter making contact between the electrodes and the lead wire assemblies. Each catheter has a safety retainer cable attached to the cap electrode and anchored to the junction. The proximal connectors have shrouded pins that meet the Performance Standard for Electrode Lead Wires and Patient Cables. The product is packaged individually as a single use disposable device and shipped ETO sterilized.

5. Intended Use of the Device:

The Zynergy Z4 Transvenous Bipotar Pacing Catheter is intended for use in temporary transvenous ventricular cardiac pacing and monitoring as in the management of impaired impulse formation or conduction.

6. Summary of Technological Characteristics of the Device Compared to the Predicate Devices:

The Z4 catheter has similar technological characteristics as the predicate devices. They all are bipolar pacing catheters with a cap electrode at the distal end and two pin leads at the proximal end. Electrodes are all made of platinum. The intended anatomical location of the distal end for all three catheters is the same: right ventricle. All three catheters are radiopaque and are offered for sale as ETO sterile, single patient use devices. Z4 catheter offers the same range of catheters, and have the same catheter length and tip curve style as the Elecath catheter. It is made of the same material as the Arrow catheter.

The differences between the Z4 catheter and the predicate devices in electrode cable design do not raise any new issues of safety or effectiveness as demonstrated by the comparable results of the functional and performance testing.

7. Tests and Conclusions:

Extensive functional and performance testing, and biocompatibility testing were conducted to assess the safety and effectiveness of the Zynergy Z4 Transvenous Bipolar Pacing Catheter. All results are satisfactory.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

NOV - 9 200

Ms. Jing Zhang Zynergy Cardiovascular, Inc. 298 Fernwood Avenue Edison, NJ 08837-3839

Re: K002687

Trade Name: Zynergy Z4 Transvenous Bipolar Pacing Catheter

Regulatory Class: II (two)

Product Code: 74 LDF Dated: August 28, 2000 Received: August 29, 2000

Dear Ms. Zhang:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act

Page 2 - Ms. Jing Zhang

for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4639. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

James E. Dillard III

Director

Division of Cardiovascular and Respiratory Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

APPENDIX 7 INDICATIONS FOR USE